

REMARKS

Prior to this Amendment, claims 1-18 were pending in the application. No claims have been canceled or added in this Amendment and Response. Thus, after entry of this Amendment and Response, claims 1-18 remain for consideration by the Examiner.

Examiner Interview

Applicant initially thanks the Examiner for the time spent discussing the application on April 27, 2010. During the interview, the Examiner, Kent Fischmann, and Libby Huskey discussed the background of the application and a combination of claim elements that the Examiner believes distinguish over the cited art. In response to the Examiner's comments, claim 1 has been amended to clarify that two or more input characteristics, *each* relating to a single input location (e.g., 123 Main St. and the intersection of Main St. and Maple St.), are received from one or more sources that are separate from an asset tracking system. For example, these sources might include a customer such as an emergency caller, an emergency operator, and/or a caller identification system. Amended method claim 1 also clarifies the sequencing of the steps of generating geocodes associated with each of the input characteristics and comparing the generated geocodes so as to make clear that the comparison occurs on a geocode level. That is, the system generates a geocode for each of the input characteristics before comparing those geocodes to resolve ambiguities in the input characteristics by determining whether the input characteristics indeed identify a same location.

Claim Rejections Under 35 U.S.C. § 112

Claims 13, 16 and 18 stand rejected under 35 U.S.C. § 112 as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Specifically, the Examiner asserts that the use of the term "the geocode" is vague and indefinite. Each of claims 13, 16, and 18 has been amended to clarify that "the geocode" is "the geocode of the same location," as suggested by the Examiner. Thus, Applicant believes that claims 13, 16, and 18 are definite under 35 U.S.C. § 112 and asks that the Examiner withdraw the rejection.

Claim Rejections Under 35 U.S.C. § 103

Claims 1-18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Publication No. 2002/0019699 ("McCarty") in view of U.S. Publication No. 2004/0087317 ("Caci"). Applicant respectfully requests reconsideration since the proposed combination of McCarty and Caci, assuming *arguendo* that the proposed combination is proper, fails to teach each feature required by the combination of features presented in claim 1 to one of ordinary skill in the art.

Amended claim 1 is directed to a method to ensure accurate geocoding of an input location. To briefly summarize, the invention involves receiving two or more characteristics associated with an input location and creating a geocode associated with each of those characteristics. The geocodes are then compared to resolve any ambiguities that exist in the characteristics that have been provided in order to confirm that the characteristics indeed identify a same location.

The method can be illustrated in the context of an emergency response system. As explained on pages 19-23 of Applicant's specification, geocoding is used to dispatch assets to customers at an input location. For instance, a police department may use geocoding to establish a location of an emergency caller and dispatch emergency response vehicles (e.g., a police car, an ambulance, a fire truck) to the caller's location. An asset tracking system 100 can automatically dispatch assets to the input location once the location is geocoded. Although the geocoding system can often provide accurate location coordinates, sometimes incorrect or errant geocodes are created. These faulty geocodes may occur, for example, when there are similar addresses in the same town (e.g., 123 Main St. and 123 Mane St.), when there are identical town names in two different states (e.g., Columbus, Ohio and Columbus, Mississippi), or when an address is new and not yet part of the available geocoding information. If an incorrect geocode is input into the asset tracking system 100, one or more assets may be sent to an incorrect location, wasting critical time in an emergency situation.

Turning to the specific claim limitations, amended claim 1 requires receiving, *from one or more sources that are separate from the asset tracking system*, a first characteristic of the input location and at least one other characteristic of the input location. As explained in paragraph [0064] of the Applicant's specification, exemplary input characteristics may include a

street address of the input location (e.g., 123 Main St.), a set of cross streets closest to the input location (e.g., the intersection of Main St. and Maple St.), a city in which the input location is located (e.g., Columbus), a state in which the input location is located (e.g., Ohio), and a phone number associated with the input location (303-817-9375). Notably the first characteristic and the at least one other characteristic of the input location are received from sources that are separate or independent of the asset tracking system. That is, as explained in paragraph [0063] of Applicant's specification, one or more input characteristics may be received from a customer such as, for instance, an emergency caller who contacts an emergency response service and provides characteristics relating to his or her location (i.e., the input location) over the phone. Alternatively or in addition, and as explained in paragraph [0069] of Applicant's specification, one or more input characteristics may be received directly from an operator such as a 911 dispatcher and/or from a separate electronic source that is communicatively coupled with the asset tracking system, such as a caller identification system.

McCarty discloses a geographical information system for use in performing a proximity analysis between a user's location and other locations of interest to the user's business. For example, the McCarty system may be used to determine a proximity of potential customers, distribution facilities, major transportation channels, wire centers, or rate centers to a user's business to assist the user in making certain business decisions (e.g., which distribution center is appropriate for the user's retail site, which customers should the user target, what telephone charge rates will apply at the user's business location, etc.). See, e.g., McCarty, paragraphs [0059], [0082]. To perform this proximity analysis, an address validation and geocode module 217 first receives an input address from a user and then validates the input address by comparing it with stored address ranges represented within the United States Postal Service ("USPS") address ZIP+4 database. If the input address is successfully validated, the address is geocoded at the rooftop level. If the address validation fails (i.e., there is no matching address within the stored USPS information), the address is geocoded at a less-precise ZIP-9 or ZIP-5 level. McCarty, paragraphs [0077]-[0079]. Once the geocode is created, the system may determine and report a distance between the input address and other known location information relating to relevant business considerations (e.g., known location information relating to potential customers, distribution facilities, major transportation channels, wire centers, rate centers, etc.), thereby simplifying the user's decision-making process.

Contrasting the requirements of claim 1, McCarty does not receive a first characteristic of the input location and at least one other characteristic of the input location from one or more sources that are separate from the asset tracking system. Instead, the address validation and geocode module 217 of McCarty receives only an input address from a separate source, and then compares that input address to information that is pre-stored within the address validation and geocode module 217 (i.e., USPS zip-code information).

In addition, the method of amended claim 1 requires a specific sequencing of steps. That is, claim 1 first requires generating a first geocode for the first characteristic and an additional geocode for at least one of the other characteristics. *After the generating of the first geocode and at least one of the additional geocodes*, the first geocode and at least one of the additional geocodes are compared. Based on this comparison, the system determines whether the first characteristic and at least one of the other characteristics identify a same location. In this regard, claim 1 requires the comparison to occur at the geocode level. In contrast, McCarty discloses comparing an input address to the stored USPS ZIP+4 information *before* the input address is geocoded. Thus, McCarty discloses a comparison that occurs at the street address or location level, not the geocode level as required by claim 1.

Moreover, the method of claim 1 requires using the geocode comparison to determine if the first characteristic and at least one of the other characteristics identify a same location, namely the input location. In this regard, if the comparison reveals that the geocodes identify a same location, then a geocode associated with that same location may be sent to an asset with confidence. If the comparison reveals that the geocodes do not identify a same location, then it is understood that additional input characteristics – and geocodes created from those characteristics – may be needed for geocode comparison to prevent an incorrect geocode from being sent to an asset. In McCarty, the comparison between the input address and the stored USPS zip-code information should always identify a same location because a zip code essentially is a function of or derived from an address. Thus, such a comparison would serve no useful purpose in the context of the claimed invention.

The Examiner primarily relies on McCarty and has cited Caci for the limited purpose of showing a method that includes sending a geocode to an asset. Regardless of whether Caci discloses this step, Caci is directed to a system for locating a cellular telephone making a call from an unknown location and does not cure McCarty's failure to disclose the steps discussed above.

For these reasons, the proposed combination of McCarty and Caci fails to teach each limitation required by claim 1. Thus, Applicant believes that claim 1 is patentable over the combination of McCarty and Caci and respectfully requests that the Examiner withdraw the rejection and allow the claim. Further, claims 2-18 depend (directly or indirectly) from claim 1, and Applicant believes these claims are allowable for at least the reasons provided for claim 1.

Conclusions

Based upon the foregoing, Applicant believes that all pending claims are in condition for allowance and such disposition is respectfully requested. In the event that a telephone conversation would further prosecution and/or expedite allowance, the Applicant invites the Examiner to contact the undersigned.

Respectfully submitted,

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